



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,827	04/06/2001	Kazuhiro Ikurumi	2001-0409A	5095
513	7590	10/16/2003	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			TAKAOKA, DEAN O	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/826,827	IKURUMI ET AL.	
	Examiner	Art Unit	
	Dean O Takaoka	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

The Examiner acknowledges Applicant's amendment to the specification (dated however typographical errors remain in the specification (page 2 – 0005). 1.8 of and 2.2 of (line 4 - Amendment) should be 1.8 pf and 2.2 pf, e.g. pico farads.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 2, 3, 6, and 8 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duan et al. (U.S. Patent No. 6,028,564) in view of Edward et al. (U.S. Patent No. 4,825,220) for reasons of record discussed in the previous office action dated April 11, 2003.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duan et al. and Edward et al. in view of Saunders et al. (U.S. Patent No. 6,343,369) for reasons of record discussed in the previous office action dated April 11, 2003.

Claim 1:

Adds the limitation “*measuring an impedance; and processing the auxiliary cut-and-remove portion until the auxiliary cut-and-remove portion is processed to reach a reference value*”.

It is the position of the Examiner that the newly added limitation remains obvious over Duan et al. in view of Edward et al.

With respect to rejection of claim 1 contained in the previous office action, Duan et al. teaches the two stubs of different lengths. Edward et al. teaches the calculation and testing of design, further where adjustment by laser trimming is accomplished where the actual value may be different from the target value (see claim 2 and Edward et al. – col. 6, lines 41-54), which does not preclude the actual value being the same as the target value (where Edward et al. further discloses that theta b and theta ab may be adjusted toward the correct value by removal of the material by laser trimmer – col. 6, lines 48-54), thus Duan et al. and Edward et al. meeting the newly added limitation.

Claim 2:

Adds the limitation “*including a capacitor*”.

It is the position of the Examiner that the newly added limitation remains obvious over Duan et al. in view of Edward et al.

Duan et al. teaches the impedance matching circuit comprising two stubs of different lengths, further comprising “a capacitor” (Cp – Fig. 3A), where Cp is treated as a short circuit and stores energy to power the signal processing component 234 (col. 5, lines 47-53) shown in Fig. 2; further where Cp of front end 332 and antenna 250 comprise section 260 which the equivalent impedance circuit is shown as 390 in Fig. 3b

(col. 6, lines 9-11), thus Duan et al. and Edward et al. meeting the newly added limitation.

Claims 3, 6, and 8 – 13:

Have not been amended and remain rejected over Duan et al. in view of Edward et al.

Claims 4 and 5:

Have not been amended and remain rejected over Duan et al. and Edward et al. in view of Saunders et al.

Response to Arguments

Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claims 1, 3 – 6 and 8 – 13 filed August 14, 2003 have been fully considered but they are not persuasive.

Duan et al. in view of Edward et al.:

The references are discussed and for simplicity hereafter referred to as Duan and Edward. It is of record as to what each discloses. With respect to Duan, it is argued that the antenna of Duan appears to be created by bending a piece of wire to make up the dipole antenna. The Examiner agrees while this is one alternative, Duan also teaches printing and etching as alternative methods for making the antenna (col. 8, lines 35-49). It is further argued that Duan fails to disclose or suggest the newly added limitation of claim 1 which is in itself correct since the rejection is based on 35 U.S.C.

103, however the Examiner refers to the teaching of Edward, discussed below, to meet the additional limitations not met by Duan under 35 U.S.C. 103.

It is argued that “*While Edward does disclose laser trimming to remove material for tuning purposes... so that the microstrip is made apparently longer*”, as with Duan above, Edward does not disclose the newly added limitation of claim 1 since the rejection is based on 35 U.S.C. 103. Edward shows two lines comprising theta ab and theta b (Fig. 2a), where theta ab is significantly longer than theta a, thus inherently where one of the microstrip is made longer than the other further supported by the disclosure of Edward (col. 6, lines 41-54).

It is the position of the Examiner that Duan and Edward meets the newly added limitation of claim 1, thus rejections of claims 1, 2, 3, 6 and 8 – 13 are maintained.

Saunders et al.:

As with Duan and Edward discussed above, it is argued that Saunders et al. hereafter referred to as Saunders, does not disclose the newly added limitation. The Examiner refers to the combination of Duan and Edward meeting the newly added limitation, where the teaching of Saunders is merely added to show the obviousness of the limitations contained in claims 4 and 5, thus the rejections of claims 4 and 5 are maintained.

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishikawa et al. – shows a planar dielectric integrated circuit.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O Takaoka whose telephone number is (703) 305-6242. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/826,827
Art Unit: 2817

Page 7

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Dean O Takaoka
Examiner
Art Unit 2817

October 7, 2003

A handwritten signature in black ink, appearing to read 'Dean O Takaoka', with a long horizontal flourish extending to the right.